

#### ABSTRACT

The invention relates to a system and method for executing a scanning procedure comprising the steps of generating CT image data for a scan, generating CT attenuation correction data for the scan, acquiring a current frame of PET data for the scan in a 3D format, and simultaneously conducting the following steps: reconstructing at least a portion of a PET image for the current frame, including the step of overlapping a portion of the current frame with an adjacent frame, and acquiring at least a portion of a next frame of PET data.